

What is claimed is:

1. A fuel cell system having a reforming reactor, the system comprising:
a fuel cell for generating power by using a supplied fuel gas and oxidizing gas;
a reforming reactor for reforming original fuel gas so as to produce a reformed
fuel gas which is supplied to the fuel cell; and
5 a drain for condensed water stored in the reforming reactor.
2. A fuel cell system as claimed in claim 1, further comprising:
a water-collecting portion which is formed by a plurality of sloped portions and
which is attached to the bottom of the reforming reactor, wherein the drain is connected
to the water-collecting portion.
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3. A fuel cell system as claimed in claim 1, further comprising:
a tank, provided at the downstream side of the drain, for storing the condensed
water.
4. A fuel cell system as claimed in claim 1, further comprising:
a purifier for the condensed water.
5. A fuel cell system as claimed in claim 3, further comprising:
a flow control device, provided at the downstream side of the tank, for
controlling the flow of the condensed water; and
a purifier for the condensed water, the purifier being provided at the
5 downstream side of the flow control device.

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6. A fuel cell system as claimed in claim 4, wherein the purifier is a combustor for off-gas discharged from the fuel cell.

7. A fuel cell system as claimed in claim 5, further comprising:
a water-level detector, attached to the tank, for detecting the water level of the condensed water stored in the tank, wherein:

the flow control device is a flow control valve; and

5 the flow control valve is controlled based on detected results of the water-level detector.

8. A fuel cell system as claimed in claim 5, further comprising:
a purification determining section for determining whether purification of the condensed water by using the purifier is possible in the current state of the fuel cell system, wherein:

5 the flow control device is a flow control valve; and

the flow control valve is controlled based on determined results of the purification determining section.

9. A fuel cell system as claimed in claim 5, wherein the flow control device is an orifice.

10. A fuel cell system as claimed in claim 1, wherein:

the reforming reactor comprises a plurality of serially-connected functional elements; and

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a water-collecting portion which is formed by a plurality of sloped portions and
5 which is attached to the bottom of each functional element of the reforming reactor,
wherein the drain is connected to the water-collecting portions.

11. A fuel cell system as claimed in claim 10, wherein the functional elements
include a heat exchanger for decreasing the temperature of the fuel gas.

12. A fuel cell system as claimed in claim 10, wherein the functional elements
include a CO remover for oxidizing CO included in the fuel gas so as to generate CO₂.

13. A fuel cell system as claimed in claim 6, wherein the combustor is a catalytic
combustor.

14. A fuel cell system as claimed in claim 8, wherein:

the combustor is a catalytic combustor; and

the purification determining section determines that the purification of the
condensed water using the purifier is possible if the temperature of catalyst of the
5 catalytic combustor is equal to or above a predetermined temperature and the water level
of the condensed water in the tank is equal to or above a predetermined level.

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